WF86 - Re-programming DME Control Unit (Workshop Campaign)

Important:	**CriticalWarning—This campaign includes steps where control unit(s) in the vehicle will be programmed with the PIWIS Tester. The vehicle voltagemust bemaintained between 13.5 volts and 14.5 volts during this programming. Failure tomaintain this voltage could result in damaged control unit(s). Damage caused by inadequate voltage during programming is not a warrantable defect. The technicianmust verify the actual vehicle voltage in the PIWIS Tester before starting the campaign and also document the actual voltage on the repair order. Please refer to Equipment Information EQ1401 for a list of suitable battery chargers/power supplies which should be used tomaintain vehicle voltage.**
Model Year:	**As of 2013 up to 2016**
Vehicle type:	**Boxster (981)/Boxster S (981)/Boxster GTS (981)** **Cayman (981)/Cayman S (981)/Cayman GTS (981)**
Country/Market:	USA (C02) Canada (C36) Korea (C39)
Equipment:	Porsche Doppelkupplung (PDK) (I-no. 250)
Subject:	**DME control unit**
Issue:	**Due to a software error in the DME control unit, there is a possibility that diagnostic information for the PDK control unit will not be further processed correctly by the DME control unit on the affected vehicles.**
	To prevent this from happening, the DME control unit must be re-programmed using an updated data record.
Remedial action:	Re-program the DME control unit using the PIWIS Tester with test software version **16.300** (or higher) installed.

NOTICE

Use of a PIWIS Tester test software version that is older than the prescribed version

• **Measure is ineffective**

⇒ **Always use the prescribed version or a higher version of the PIWIS Tester test software for control unit programming.**

Affected Vehicles: Only the vehicles assigned to the campaign (see also PIWIS Vehicle information).

Tools:
- **9818 - PIWIS Tester II** with PIWIS Tester test software version **16.300** (or higher) installed.
- Battery Charger/Power Supply - Suitable for AGM Type batteries, recommended current rating of **70A** fixed voltage 13.5V to 14.5V. Refer to Equipment Information EQ-1105.

Preliminary work

NOTICE

Fault entry in the fault memory and control unit programming aborted due to low voltage.

- **Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.**

⇒ **Before starting control unit programming, connect a battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V.**

NOTICE

Control unit programming will be aborted if the Internet connection is unstable.

- **An unstable Internet connection can interrupt communication between PIWIS Tester II and the vehicle communication module (VCI). As a result, control unit programming may be aborted.**

⇒ **During control unit programming, always connect PIWIS Tester II to the vehicle communication module (VCI) via the USB cable.**

NOTICE

Control unit programming will be aborted if the vehicle key is not recognized

- **If the vehicle key is not recognized in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.**

⇒ **Switch on the ignition using the original vehicle key. To do this, replace the original vehicle key in the ignition lock with the plastic key fob if it was previously removed at the start of this procedure.**

Procedure: 1   Carry out general preliminary work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Preliminary work"'*.

AfterSales

Carrying out control unit programming

Information

During DME control unit programming, the **PDK control unit** is also re-programmed and coded automatically.

The **instrument cluster** is also re-programmed on the following vehicles:

- Model year 2013 vehicles

- Model year 2014 vehicles with I-no. IY1 (vehicles manufactured **before** week 45/2013)

Information

When the instrument cluster is re-coded, the **individual settings** implemented in the instrument cluster by the customer will be **lost** and are reset to the **default values** of the **country version** that applies to the vehicle.

After carrying out the campaign, therefore, please inform your customers that personal settings they have implemented in the instrument cluster will have to be **set again** and provide them with any **help and support** they need for setting the relevant options.

This affects the following settings in the Vehicle menu, for example:

- Lowering of door mirror on passenger's side during parking manoeuvres

- Locking settings

- Light & Visibility settings

- Units (kilometres/miles, Celsius/Fahrenheit, …)

- Language

Procedure: 1   **Re-program DME control unit**.

The basic procedure for programming a control unit is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"'.*

For specific information on control unit programming during this campaign, see table below.

NOTICE

Use of a PIWIS Tester test software version that is older than the prescribed version

- **Measure is ineffective**

⇒ **Always use the prescribed version or a higher version of the PIWIS Tester test software for control unit programming.**

Required PIWIS Tester software version:	**16.300** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function for the DME control unit. **DME control unit**> ⇒ **'Programming'** menu >>**'Automatic programming'** function.
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the DME control unit is **re-programmed** and then **re-codedautomatically**. The **PDK control unit** - and the **instrument cluster**, if necessary - is also re-programmed and coded automatically. **Do not interrupt programming and coding.**
Programming time (approx):	**12 minutes** If the **instrument cluster** is also re-programmed, the total programming time is **approx. 28 minutes**.
Procedure in the event of **abnormal termination** of control unit programming:	• End the guided programming sequence and disconnect the PIWIS Tester from the vehicle. • Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Connect the PIWIS Tester to the vehicle and repeat control unit programming by restarting programming. • If the DME and PDK control units have been programmed successfully and only the **instrument cluster programming** was not completed successfully, the instrument cluster can also be re-programmed again **separately** by entering the programming code **C8K6B**.
Procedure in the event of **other error messages** appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'.*
Procedure in the event of **other malfunctions following** control unit programming:	• Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Check to see if the problem persists.

## Reading out and erasing fault memory

Procedure: 1   In the control unit selection screen (⇒ 'Overview' menu), press •F7" to call up the Additional menu.

2   Select the function "Read all fault memories and erase if required" and press •>>" to confirm ⇒ *Erasing fault memories*.

The fault memories of the control units are read out.

3   Once you have read out the fault memories, erase the fault memory entries by pressing •F8".

4   Press •F12" ("Yes") in response to the question as to whether you really want to delete all fault memory entries.
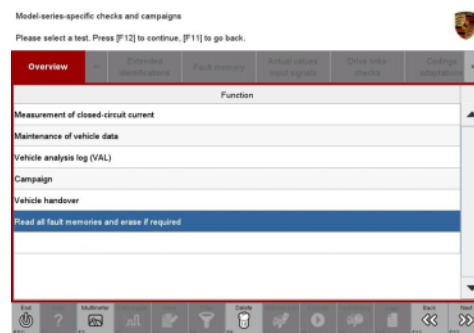
Erasing fault memories

The faults stored in the fault memories of the various control units are deleted.

ℹ️ Information

If there are still fault memory entries in individual control units, start the engine briefly and then switch it off again. Wait for approx. 10 seconds before switching the ignition on again and re-establish the connection between the PIWIS Tester and the vehicle. Then read out and erase the fault memories of the affected control units again separately.

If control units are found to have faults which cannot be erased and are not caused by control unit programming, these faults must be found and corrected. This work **cannot** be invoiced under the workshop campaign number.

5   Once you have erased the fault memories, select the ⇒ **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.
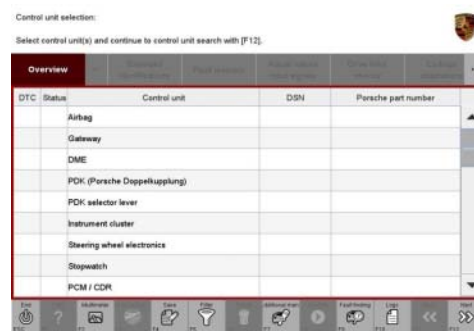

Control unit selection

Perform throttle valve adaptation

Procedure: 1   Select the **'DME'** control unit in the control unit selection screen ('Overview' menu) and press •>>" to confirm your selection.

2 Once the DME control unit has been found and is displayed in the overview, select the ⇒ **'Maintenance/repairs'** menu.

3 Select menu item ⇒ **'Adaptations'** and press
•>>" to confirm your selection ⇒ *DME - Adaptations*.
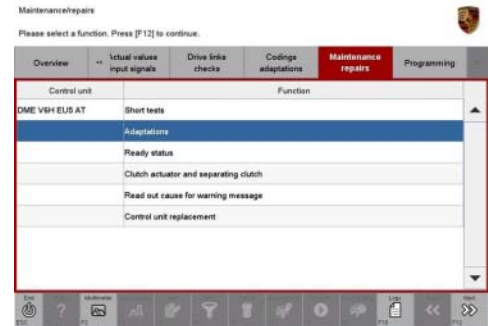
DME - Adaptations

4 Comply with the displayed preconditions and press
•>>" to confirm ⇒ *Adaptation preconditions*.
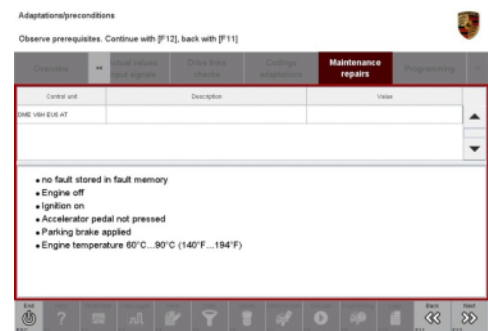
Adaptation preconditions

5 Select the ⇒ **'Throttle valve adaptation'** function so that the corresponding text line turns blue and press •F8" to start the throttle valve adaptation ⇒ *Throttle valve adaptation*.

6 Follow the instructions on thePIWIS Tester while throttle valve adaptation is being performed.

Once throttle valve adaptation is complete, a tick will appear in the "Value" field in the PIWIS Tester display.

If throttle valve adaptation is **not** completed successfully, adaptation must be **repeated**.

Throttle valve adaptation

7 Press •F8" ("Stop") to end throttle valve adaptation.

8 Press •<<" to return to the start page of the ⇒ **'Maintenance/repairs'** menu.

9 Select the ⇒ **'Overview'** menu and press •<<" to return to the control unit selection screen.

Reworking

Procedure: 1   Switch off the ignition.

2   Disconnect the PIWIS Tester from the vehicle.

3   Switch off and disconnect the battery charger.

4   On vehicles with Porsche Entry & Drive, replace the original driver's key in the ignition lock with the control unit again.

i   **Information**

The values for the Tyre Pressure Monitoring (TPM) system may be lost during re-coding of the instrument cluster.

If the Tyre Pressure Monitoring (TPM) system is reset, you must select **main menu**>**TPM**>**Settings** in the instrument cluster to reset the **tyre type** and **tyre size**. The wheel position values will then be re-taught in the control unit during the **test drive** (at a speed of over **25 km/h** or **15 mph**).

To set the tyre type and tyre size, see ⇒ Driver's Manual, chapter Instrument Panel and Multi-Function Display - 'Tyre Pressure Monitoring, TPM'.

5   Enter the campaign in the Warranty and Maintenance booklet.

Warranty Invoicing

Scope 1:   **Re-programming DME control unit**
The **PDK control unit** and the **instrument cluster** are also re-programmed automatically.

- **Model year 2013** vehicles
- **Model year 2014 vehicles with I-no. IY1** (vehicles manufactured **before** week 45/2013)

Working time:	
Re-programming DME control unit	Labor time: **60 TU**
Includes: Re-programming PDK control unit	
Re-programming instrument cluster	
Connecting and disconnecting battery charger	
Connecting and disconnecting PIWIS Tester	
Performing throttle valve adaptation	
Reading out and erasing fault memories	
Warranty Invoicing: ⇒ **Damage Code WF86 66 000, Repair Code 1**	

Scope 2:   **Re-programming DME control unit**

Technical Information

The **PDK control unit** is also re-programmed automatically.

- **Model year 2014 vehicles with I-no. IY2** (vehicles manufactured **from** week 45/2013)
- **Model year 2015 and 2016** vehicles

Working time:	
Re-programming DME control unit	Labor time: **50 TU**
Includes: Re-programming PDK control unit	
Connecting and disconnecting battery charger	
Connecting and disconnecting PIWIS Tester	
Performing throttle valve adaptation	
Reading out and erasing fault memories	
Warranty Invoicing: ⇒ Damage Code WF86 66 000, Repair Code 1	

Dealership Distribution Routing	Service Manager	_____	Shop Foreman	_____	Service Technician	_____	_____	_____	_____
	Asst. Manager	_____	Warranty Admin.	_____	Service Technician	_____	_____	_____	_____

AfterSales

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